STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0030473

Owner: City of Lockwood

Address: 107 East 8th Street, Lockwood, MO 65682

Continuing Authority: Same as above Address: Same as above

Facility Name: Lockwood Wastewater Treatment Facility

Facility Address: West 10th, Lockwood, MO 65682

Legal Description: Outfall #001 – SW ¼, NW ¼, Sec. 36, T31N, R28W, Dade County

Outfall #002 - SW 1/4, NW 1/4, Sec. 26, T31N, R28W, Dade County

Receiving Stream: Horse Creek (C)

First Classified Stream and ID: Horse Creek (C) (01351) USGS Basin & Sub-watershed No.: (10290106-090001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - POTW - SIC #4952

Three cell lagoon / sludge is retained in lagoon.

Outfall #002 - POTW - SIC#4952

Chlorination / land application at golf course

Design population equivalent is 1,224.

Design flow is 239,000 gallons per day.

Actual flow is 116,000 gallons per day.

Design sludge production is 18.4 dry tons/year.

Actual sludge production is 18.36 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 14, 2002 January 28, 2003

Effective Date (Revised)

Stephen M. Mahfood, Director Department of Natural Resources Executive Secretary, Clean Water Commission

June 13, 2007

Expiration Date

R. Bruce Martin, Director, Southwest Regional Office

Land Application to Golf Course

Irrigation Volume / Year: 1,800,000

Irrigation areas: 1 acre at design loading (1-acre total available)

Application rates / acre: 0.88 inches hour; 3.08 inches / week; 66 inches / year

Field slopes: less than 1 percent

Equipment type: sprinklers

Vegetation: golf course

Application rate is based on: hydraulic loading rate

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 3 of 5

PERMIT NUMBER MO-0030473

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand ₅ **	mg/L		65	45	once/month	grab
Total Suspended Solids**	mg/L		110	70	once/month	grab
pH – Units	SU	***		***	once/month	grab
Outfall #002 – at golf course – irrigated wastewater (Notes 1 & 2)						
Fecal Coliform	#/100mL	200		200	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u>; THE FIRST REPORT IS DUE <u>March 28, 2003</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 65% or more.
- *** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.
- Note 1 Wastewater that is irrigated at the golf course shall be sampled at the irrigation pump or wet well.
- Note 2 Monitor only when irrigating wastewater at the golf course. Submit an annual report by January 28 of each year listing the gallons irrigated each month and total gallons per year at the golf course and summary of the test results.

C. SPECIAL CONDITIONS

- 1. Wastewater irrigation at the golf course Outfall #002
 - (a) Wastewater that exceeds fecal coliform limits of 200 colonies/100mL shall not be irrigated at the golf course.
 - (b) Irrigation shall not occur during access by the public.
 - (c) Wastewater irrigation lines shall be constructed and in accordance with 10 CSR 20-8.020(15)(f)(9) to avoid use as potable water supplies or cross connection with potable water systems.
- 2. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

C. SPECIAL CONDITIONS (continued)

- (2) controls any pollutant not limited in the permit.
- (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 3. All outfalls must be clearly marked in the field.
- 4. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
- 5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 6. Report as no-discharge when a discharge does not occur during the report period.
- 7. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;

C. SPECIAL CONDITIONS (continued)

- (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 8. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.